

### **Remarks**

Claims 1-20 are pending in the application. Claims 2, 4, 14, 15, 17 and 20 are withdrawn from consideration; claims 1, 3, 6-9, 11-13, 16 and 18 are rejected; and claims 5-10 and 19 are objected to. By this paper, claims 1, 8, 9, 13 and 16 are amended, and claims 6, 7, 11 and 12 are canceled. Based on the following, consideration of the amended claims, and reconsideration of the remaining claims, are requested.

### **Specification**

By this paper, the specification is amended on page 1 to update the status of the parent application, which has issued into a patent. In addition, the specification is amended at page 11 to correct a typographical error.

### **Claim Rejections—35 U.S.C. § 103**

The Examiner rejected claims 1, 3, 9, 16 and 18 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,378,637 (Ono et al.) in view of U.S. Patent No. 6,220,380 (Mita et al.). By this paper, claims 1, 9 and 16 are amended to more particularly point out and distinctly claim the subject matter of the invention. For example, amended claim 1 recites a vehicle that includes "a vehicle body including a floor having a first concavity formed therein for receiving a third portion of the [energy producing and storage] system from outside the vehicle ... [and] a second concavity ... oriented longitudinally along a length of the vehicle and having a depth greater than a depth of the first concavity, thereby providing a conduit between a front of the vehicle and a rear of the vehicle." Amended claim 1 contains limitations that are neither taught nor suggested by the combination of Ono et al. and Mita et al. Amended claim 1 contains limitations from original claims 6 and 7, which accordingly, have been canceled. Because the Examiner included another patent reference—U.S. Patent No. 6,085,854 (Nishikawa)—in the rejections of claims 6 and 7, this combination is now addressed with regard to amended claim 1.

The Examiner states that Nishikawa shows a frame structure for locating a battery that is "formed from longitudinal and transverse rails the [sic] provide concavities of differing heights (see for example Figure 4)." The Examiner also states that in Figure 6 Nishikawa "teaches that the rails provide a conduit for cooling air." Although Nishikawa does describe a battery frame structure for an electric motor car, Applicants respectfully disagree with the Examiner's interpretation of the teachings of Nishikawa. For example, Figure 4 shows a cross section of two support rails 9, 10. Although the ends of the rails 9, 10 are open in the cross-sectional view, they are closed in a complete view of the structure—see, e.g., Figure 3. This does not teach or suggest first and second concavities where the second concavity has a depth greater than the first concavity and provides a conduit between a front of the vehicle and the rear vehicle. In Nishikawa, the support rails do not provide a conduit for anything, as each of the ends of each of the rails is closed, making the inner portion of the rail inaccessible. Nishikawa teaches that the air streams used to cool the batteries flow around the outside of the rails, rather than the rails providing a conduit for the airflow—see e.g., column 5, lines 8-12, 31-35; Figures 1-3 and 6.

The Examiner states that "[o]ne would be motivated to use the frame structure, as taught by Nishikawa, to allow cooling air to flow around the fuel cell, thereby providing cooling of the fuel cell." In fact, the combination of the Nishikawa frame structure and the inventions of Mita et al. and Ono et al. teaches away from the present invention as recited in amended claim 1. For example, amended claim 1 includes first and second portions of an energy producing and storage system that cooperate in a nesting relationship to minimize vehicle space usage. In addition, the first concavity is formed in the floor of the vehicle to receive a third portion of the system, rather than relying on an additional structure that, far from minimizing space usage, significantly increases space usage. Thus, there is no suggestion or motivation to combine Nishikawa with Mita et al. and Ono et al., as the combination teaches away from the present invention. Even if, however, Nishikawa is combined with the other two references, amended claim 1 still contains limitations which are neither taught nor suggested by the combination.

A similar analysis is relevant for amended claim 9, which recites first and second concavities formed in a floor of a uni-body of a vehicle, where the second concavity has a depth greater than that of the first concavity to form a conduit between the front and rear of the vehicle. Amended claim 9 contains limitations from original claims 11 and 12, which have accordingly been canceled. Similarly, amended claim 16 recites a method for packaging an energy producing and storage system in a vehicle having first and second concavities formed in a floor of the vehicle. The second concavity has a depth greater than a depth of the first concavity, which forms an open space above the first concavity. The method includes the step of "placing at least one of a coolant line or electrical wire through the open space above the first concavity." For both of amended claims 9 and 16, there is no suggestion or motivation to combine Nishikawa with Mita et al. and Ono et al., because, for example, the combination teaches away from the invention as claimed. Even if, however, Nishikawa is combined with the other two references, amended claims 9 and 16 each contain limitations which are neither taught nor suggested by the combination.

By this paper, claims 8 and 13 are also amended to change their respective dependencies, necessitated by the canceling of claims 6 and 11. Of the remaining claims, amended claim 1 is the base claim for claims 3 and 8; amended claim 9 is the base claim for claim 13; and amended claim 16 is the base claim for claim 18. Each of these dependent claims contains all of the limitations of its respective base claim, as well as additional limitations which further distinguish it from the cited references. Therefore, Applicants submit that claims 1 (as amended), 3, 8, 9 (as amended), 13, 16 (as amended), and 18 are each allowable over the cited combination of references.

#### **Allowable Subject Matter**

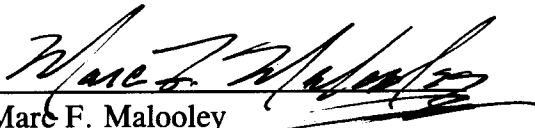
The Examiner objected to claims 5, 10 and 19 as being dependent upon a rejected base claim, but indicated that each would be allowable if rewritten in independent form to include all of the limitations of its respective base claim and any intervening claims. The respective base claims for claims 5, 10 and 19 are amended claims 1, 9 and 16. As discussed

above, these base claims are believed to be allowable, and therefore, Applicants respectfully request withdrawal of the objections to the dependent claims.

Please charge any fees or credit any overpayments as a result of the filing of this paper to Ford Global Technologies LLC Deposit Account No. 06-1510.

Respectfully submitted,

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